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APPLICATION NO.	F	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/782,288	10/782,288 02/19/2004		John McSheffrey JR.	04373-032001	4294		
26161	7590	03/13/2006		EXAM	EXAMINER		
FISH & RI		SON PC	SHAH, SAMIR M				
P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				ART UNIT	PAPER NUMBER		
	,			2856			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applic	ation No.	Applicant(s)					
		10/78	2,288	MCSHEFFREY E	TAL. (AN)	り			
(	Office Action Summary	Exami	ner	Art Unit					
		Samir	M. Shah	2856					
<i>Th</i> Period for Re	e MAILING DATE of this communiceply	ation appears on	the cover sheet wit	h the correspondence ad	dress				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
2a) ☐ This 3) ☐ Sind	ponsive to communication(s) filed action is <b>FINAL</b> .  2 to this application is in condition for the desired in accordance with the practices.	b)⊠ This action or allowance exc	s non-final. ept for formal matte		merits is				
Disposition o	of Claims								
4a) 0 5)	m(s) 1-49 is/are pending in the ap of the above claim(s) 1-16 and 30 m(s) is/are allowed. m(s) 17-21,23,24 and 28 is/are re m(s) 22,25-27 and 29 is/are object m(s) are subject to restrictive papers specification is objected to by the drawing(s) filed on 24 May 2004 is licant may not request that any object lacement drawing sheet(s) including to oath or declaration is objected to be	iected. iected to. on and/or election  Examiner. s/are: a) acce	n requirement.  pted or b)⊠ object s) be held in abeyand quired if the drawing(s	ed to by the Examiner. ce. See 37 CFR 1.85(a). s) is objected to. See 37 CF	• •				
,	·	by the Examiner.	Troto the analysis						
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.									
2) Notice of D 3) Information	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PT n Disclosure Statement(s) (PTO-1449 or P s)/Mail Date <u>2/19/04; 5/5/05</u> .		Paper No(s)	ummary (PTO-413) /Mail Date formal Patent Application (PTC _·	)-152)				

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#### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election without traverse of claims 17-49 in the reply filed on 2/21/06 is acknowledged. Please note that claims 30-49 are indicated as non-elected as they are directed to an embodiment other than "medical" as defined in Applicant's written Specification.

#### Oath/Declaration

2. It does not identify the citizenship of each inventor.

## **Drawings**

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "124" has been used to designate both "apertures" and "oxygen tanks". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Specification

4. The disclosure is objected to because of the following informalities

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5. The phrase "pressured gases that are also monitored by gauges." (page 1, last line) should be deleted since it is repeated on page 2, first line. The phrase "respective gauges 132, 134" should be deleted and replaced by -- respective gauges 134, 132 -- to confirm with the word "respective".

Appropriate correction is required.

# Claim Objections

6. Claim 20 is objected to because of the following informalities:

The word "configures" (first line of the claim) should be deleted and replaced by - configured --. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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9. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheffield et al. (US Patent 5,123,409 henceforth "Sheffield") in view of Lameyer (US Patent 4,246,046 henceforth "Lameyer") and Brazier et al. (US Patent Application Publication 2003/0071736 A1 henceforth "Brazier").

10. As to claim 17, Sheffield teaches that a supply of oxygen in a tank may be used with a mask to provide oxygen (as a medical fluid) to an individual wherein, the tank may be monitored, e.g. for quantity of gas remaining in the tank, by the use of a pressure gauge (36), which necessarily demands that the tank be within the view of any individual who is checking/monitoring the tank (See column 3, lines 40-46).

Sheffield does not teach the use of such an oxygen tank in a hospital. Moreover, Sheffield does not teach any application of a remote inspection or a wireless monitoring system.

Lameyer teaches the use of oxygen tanks to effectively provide oxygen to patients in a hospital (See column 1, lines 15-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Sheffield's oxygen tank in a hospital.

Brazier discloses a wireless monitoring system for a pressurized container including, a container/tank (11) which is pressurized (See fig. 1, paragraph 0034, lines 4-6); a detector/sensor (14) in operative communication with the pressurized fluid for measure of a predetermined internal/operating condition of the container (11) (See fig. 1, paragraph 0041, lines 1-3); an electronic circuit/transmitter in communication between the detector/sensor and a remote central station/control (50) for issue of a

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wireless signal (16) to the remote central station/control (50) (See fig. 1, paragraph 0051, lines 1-3), the wireless signal including information about the predetermined internal/operating condition (See paragraph 0042, lines 1-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ Brazier's wireless monitoring system to transmit the measured quantity of gas in Sheffield's tank to a remote location (e.g. nurse's desk) since Brazier teaches that the quantity of fluid with any tank may be effectively monitored in a wireless fashion, permitting any individual (e.g. nurse) to check the quantity of gas in the tank from a remote location without the need of taking the time to actually travel to the tank.

11. As to claims 18, 19 and 20, note Sheffield's "adequate" (Column 3, line 45) teaching, suggestive of interest in range of adequate/predetermined pressure values.

Sheffield fails to disclose an electronic circuit issuing a wireless signal.

Brazier discloses that the electronic circuit/transmitter, which can be part of the sensor, is adapted to issue a wireless signal upon detection of the predetermined internal/operating condition (See paragraph 0091, lines 5-9); he discloses a predetermined internal/operating condition comprising an out of range pressure condition of the pressurized fluid (See paragraph 0014, lines 1-3; paragraph 0041, lines 7-12 and claim 3); he further discloses that the electronic circuit/transmitter, which can be part of the sensor, is configured to issue a signal upon detection that the pressure of the fluid is at or below a predetermined level (See paragraph 0091, lines 5-12 and claim 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Brazier's electronic circuit along with the issue of a wireless signal upon detection of a predetermined internal condition, because of the motivation to employ Brazier's wireless monitoring system as explained above in the rejection to claim 17.

- 12. As to claim 21, Sheffield discloses a fluid pressure gauge (36) in communication with the container/tank fluid/oxygen for measure and display of a pressure condition of the fluid/oxygen (See column 3, lines 44-46).
- 13. Claims 23, 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheffield in view of Lameyer and Brazier, as applied against claim 17, and further in view of Harvie (US Patent Application Publication 2003/0189492 A1 henceforth "Harvie") and Smith et al. (US Patent 4,823,788 henceforth "Smith").
- 14. As to claims 23 and 24, Sheffield is relied upon from the disclosure set forth above for the rejection to claim 17. Sheffield fails to disclose a second detector for detection of a predetermined external condition.

Harvie teaches the use of an oximeter at the top of the tank (paragraph 0099).

Smith teaches measuring the flow rate of an oxygen tank (column 1, lines 30-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a second detector to test a predetermined external condition of Sheffield's tank to either measure the flow rate as taught by Smith or to employ an oximeter as taught by Harvie.

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15. As to claim 28, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a third detector in order to both employ Harvie's oximeter, as Harvie teaches benefit of using an oximeter on top of the tank, and measure the flow rate of the tank, as Smith teaches the benefit of making flow rate measurements.

## Allowable Subject Matter

16. Claims 22, 25-27 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,856,251 to Tietsworth et al.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir M. Shah whose telephone number is (571) 272-2671. The examiner can normally be reached on Monday-Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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